



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/572,967

03/21/2006

Andrew J. Hardwick

36-1962

4570

23117

7590

06/24/2010

NIXON & VANDERHYE, PC
901 NORTH GLEBE ROAD, 11TH FLOOR
ARLINGTON, VA 22203

EXAMINER

SADIO, INSA

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

06/24/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/572,967	Applicant(s) HARDWICK, ANDREW J.	
	Examiner INSA SADIO	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 1006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/21/2006, 10/04/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claims 1-10** are rejected under 35 U.S.C. 102(b) as being anticipated by Rosenberg et al.(US Patent Number 5,734,373), hereinafter referenced as Rosenberg.

As of claim 7, Rosenberg discloses a Method and apparatus for controlling human-computer interface systems providing force feedback. Further, Rosenberg teaches wherein said

An interactive haptic output terminal in combination with a bi-directional transmission arrangement (see col2 L5-34), the terminal comprising at least a haptic output

device and control means (see col8 L15-34), said control means receiving signals from said haptic output

device to determine a current position for said device (see col3 L3-55, fig.4 [92]), and to determine from signals

received from said transmission arrangement a preferred current position for said haptic output device (see col4 L6-17, L37-63, figs. 5 and 20), said control mean determining an output force and direction required to

move said haptic output device from the current position to the preferred position (see col4 L6-17, L37-63, figs. 5 and 20), storing historic positional data defining each of a

Art Unit: 2629

multiplicity of positions to which the haptic output device has moved (see col4 L6-17, L37-63, figs. 5 and 20), deriving a model of the space in which directional forces are being applied and storing data defining said model (see col48, L37-64) , deriving from the historic positional data and the data defining the model an anticipated position and generating output signals defining force and direction to move the haptic output device towards said anticipated position and correcting for differences between the anticipated position and the transmitted position on receipt of subsequent positional data (see col31, L56-63-37, col 37 L60-67, fig.4 [80, 82, 84]).

As of claim 8, Rosenberg teaches the limitations of claim 7 above. Further, Rosenberg teaches wherein said a terminal in which the control means receives signals from the haptic output device(see col3 L24-42, col8 L25-37), said signals containing data defining the position of said device at any particular time, said control means converting said data to signals for transmission to said bi-directional transmission arrangement at predetermined intervals (see col7 L39-55, col35 L12-32).

As of claim 9, Rosenberg teaches the limitations of claim 7 above. Further, Rosenberg teaches wherein said a terminal in which the signals defining a preferred current position are generated by an environment simulator, for example a programmed computer (see col6 L24-42).

As of claim 10, Rosenberg teaches the limitations of claim 7 above. Further, Rosenberg teaches wherein said a terminal in which the signals defining a preferred

Art Unit: 2629

current position are generated by a corresponding interactive output terminal at the opposed end of the transmission arrangement (see col6 L19-34).

As of claim 1, 2, and 3, claims 1, 2, and 3 are rejected the same as claim 7.

Only, claims 1, 2 and 3 are method claims.

As of claim 4, Rosenberg teaches the limitations of claim 1 above. Further, Rosenberg teaches wherein said the method of in which latency of the network is determined by transmitting a data packet to the network said packet including a time determinant identity (see col20 L8-34), reflecting the data packet through the network and comparing the received time with the transmitted time to provide a latency parameter from which said damping factor is determined (see col21 L8-34).

As of claim 5, Rosenberg teaches the limitations of claim 4 above. Further, Rosenberg teaches wherein said the method in which at least some transmitted packets carrying positional data also include the time determinant data, some of said time determinant data being returned to permit updating of the latency parameter (see col20 L22-col21 L16, col 18 L7-41).

As of claim 6, Rosenberg teaches the limitations of claim 1 above. Further, Rosenberg teaches wherein said
The method of further including applying a modifying factor to the force and direction signals, said modifying factor being derived from pre determined user preference data (see col.9, L43-65).

Conclusion

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSA SADIO whose telephone number is (571)270-5580. The examiner can normally be reached on MONDAY through FRIDAY 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

INSA SADIO
Examiner
Art Unit 2629

/INSA SADIO/
Examiner, Art Unit 2629

/Amare Mengistu/

Application/Control Number: 10/572,967

Page 6

Art Unit: 2629

Supervisory Patent Examiner, Art Unit 2629